VIDEOLOGY®

IMAGING SOLUTIONS INC.

LCD MONITOR USER MANUAL

45M20-1 20” TFT LCD

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This document provides technical information for the user. Videology reserves the right to modify the information in this document as necessary. The customer should make sure that they have the most recent manual version. Videology holds no responsibility for any errors that may appear in this document.

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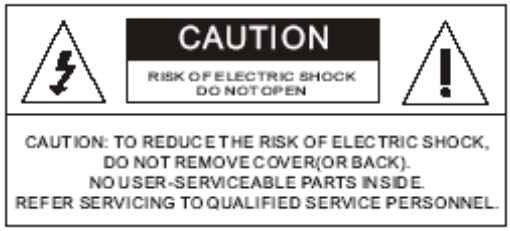
1. Warning

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK:
DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION:


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER(OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of Graphical Symbols

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of non-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

2. Precautions

2.1. Safety

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further. Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself. Allow adequate air circulation to prevent internal heat built-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

2.2. Installation

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust or mechanical vibration. The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

2.3. Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

3. Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that changes or modifications not expressly approved by that party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received including interference that may cause undesired performance.

4. Features

- NTSC/PAL Auto Selectable
- High Contrast 700:1
- 450 cd/m2 Brightness
- Fast LCD Response Time of 5ms
- IR Remote Control
- Inputs/Outputs: 1 BNC Composite Video
- Auto Termination 75 Ohms
- VESA Standard Bracket & Desktop Mount
- Easy OSD Menu User Interface
- Wide Viewing Angle (160^0 Vertical and Horizontal)
- Wall Mountable

5. Operating Instructions

5.1. Control

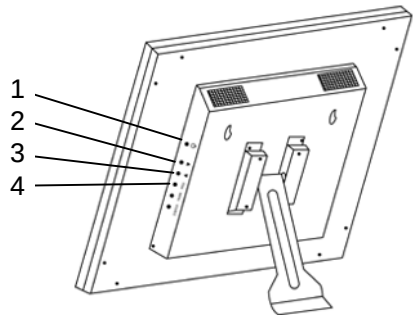


Figure 1. 20" LCD Monitor

1. **Power**
   Monitor power ON / OFF. At OFF mode, monitor will be at standby status
   Green Light -- Power On
   Red Light -- Standby mode

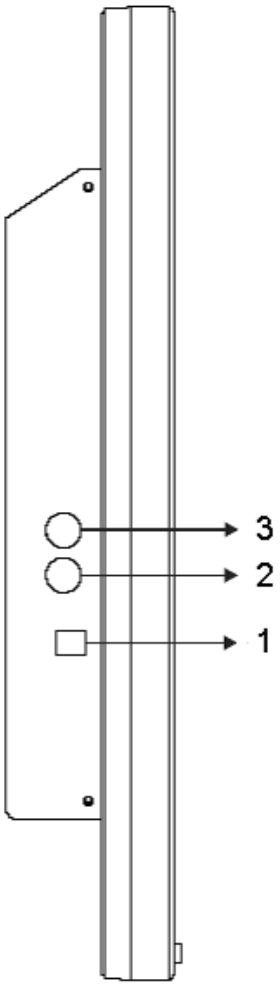
2. **Adjust** ⇦
   Increase the value on the OSD menu or turn ON / OFF function

3. **Adjust** ⇨
   Decrease the value on the OSD menu or turn ON / OFF function

4. **Item**
   Choose sub menu from Video
   Press again to enter selected option

6. Connectors

6.1. 20” Monitor Back Panel



1 **Regulated 12VDC Power Input**

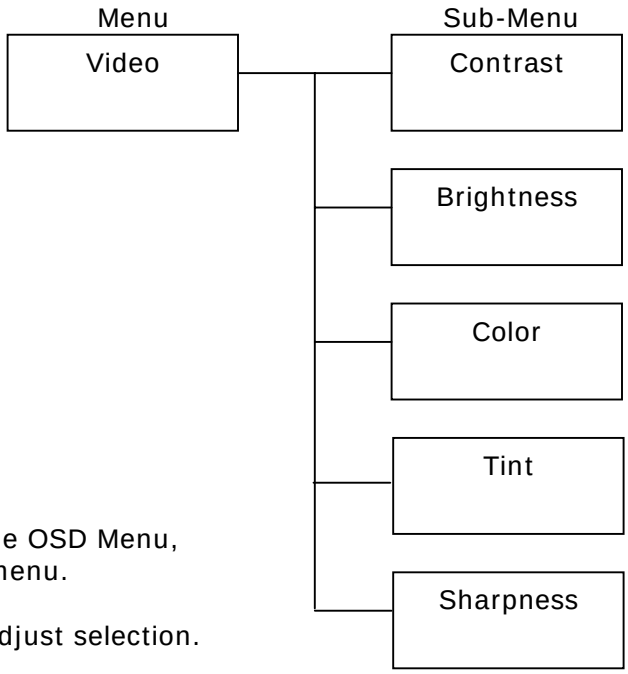
2 **Video 1 IN**
Composite signal input for Video 1

3 **Video 1 OUT**
Video looping output for Video 1

Figure 1. 20” Back Panel

7. OSD Architecture

7.1. 20” Monitor Video Function

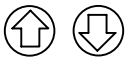


Under AVI Mode:

Press the ITEM button to bring up the OSD Menu, then press ITEM again to enter submenu.

As shown, press keys to adjust selection.

Figure 2. Example

Note: In remote control, press  **key to adjust.**

(After adjustment, the monitor will store new settings)

Contrast
Permits adjustment for contrast between light or dark areas of the picture.

Brightness
Adjusts the overall picture shade and brightness. Tip: Use the Brightness to make details in the dark areas of the picture to be just visible, and Contrast to brighten the picture without causing video noise and foreheads to turn white.

Color
Adds color to the black and white picture content (of a color signal), and is usually set for viewer's preference in color saturation.

TINT
Adjusts the colors on the screen. Reds and yellows are most noticeable. Tint also sets for pleasing facial tones. **Note: Appears in NTSC mode only.**

Sharpness
Sets the desired sharpening enhancement to the picture.

8. LCD Monitor Mounting Guide

8.1. Desktop Mount

Adjust the viewing angle of LCD to fit the most comfortable monitoring status.

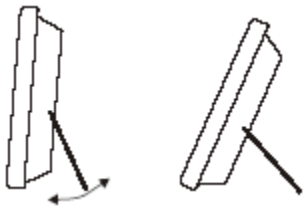


Figure 3.

8.2. Wall / VESA mount

Please follow the fix-hole size on back panel to install the LCD to the wall directly, or use a VESA mount.

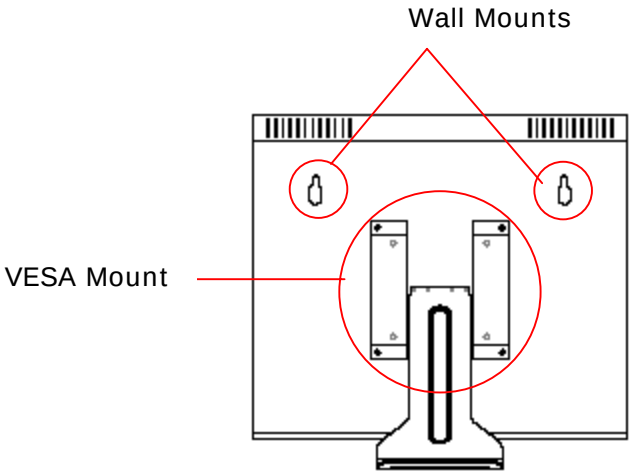


Figure 4.

9. Device Connectors

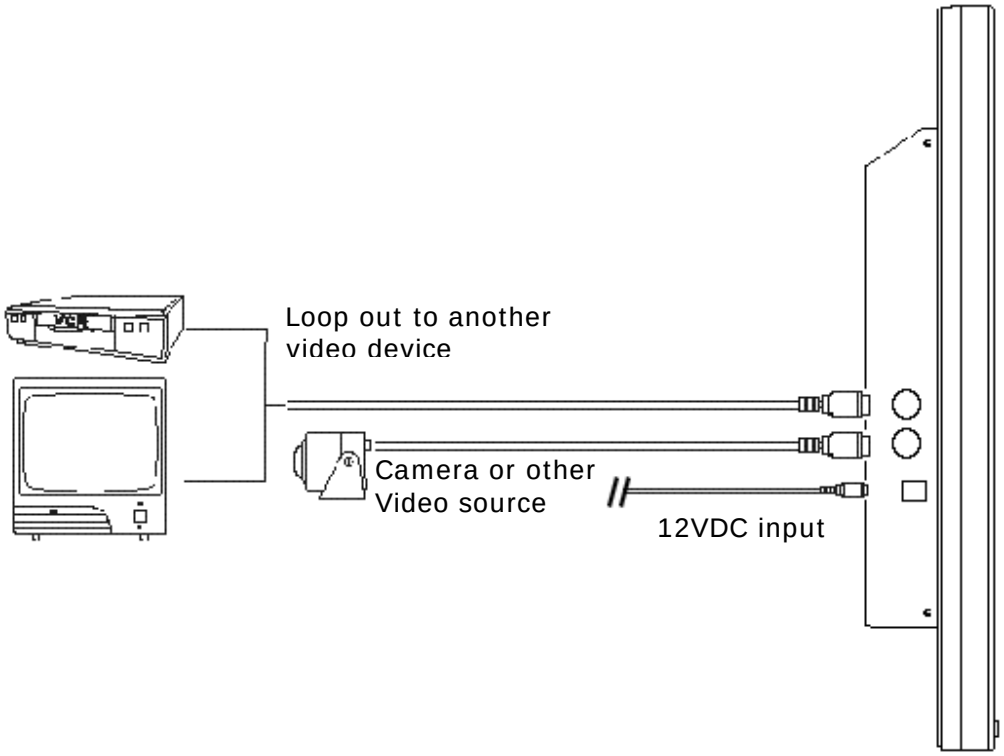


Figure 5. LCD Connectors

a) Connect External device such as DVD or Game Player to Monitor as shown in the above picture

b) Connect CCD Camera 1 and 2 to Monitor through Video Input 1 and 2 (BNC Connect) as showing in the above picture

10. Specifications

Electrical

	45M20-1
Operating System	NTSC/PAL auto detect
Brightness	450 cd/m2
Aspect Ratio	4:3
Picture Diagonal	20"
Active Area (W x H)	13.24” x 11.85” (336.3mm x 301.1mm)
Resolution (H x V)	800 x 600
Video Angle	Up 80°, Down 60°, Left 80°, Right 80°
Contrast Ratio	700:1
Video Input	1 CH composite video 1Vp-p 75ohm
Video Output	1 CH composite video 1Vp-p 75ohm
In/Out Impedance	Auto termination (75 Ohms)
Power Source	12VDC/90-260VAC 60Hz/50Hz adaptor
Power Consumption	3.5A/45W

Environmental

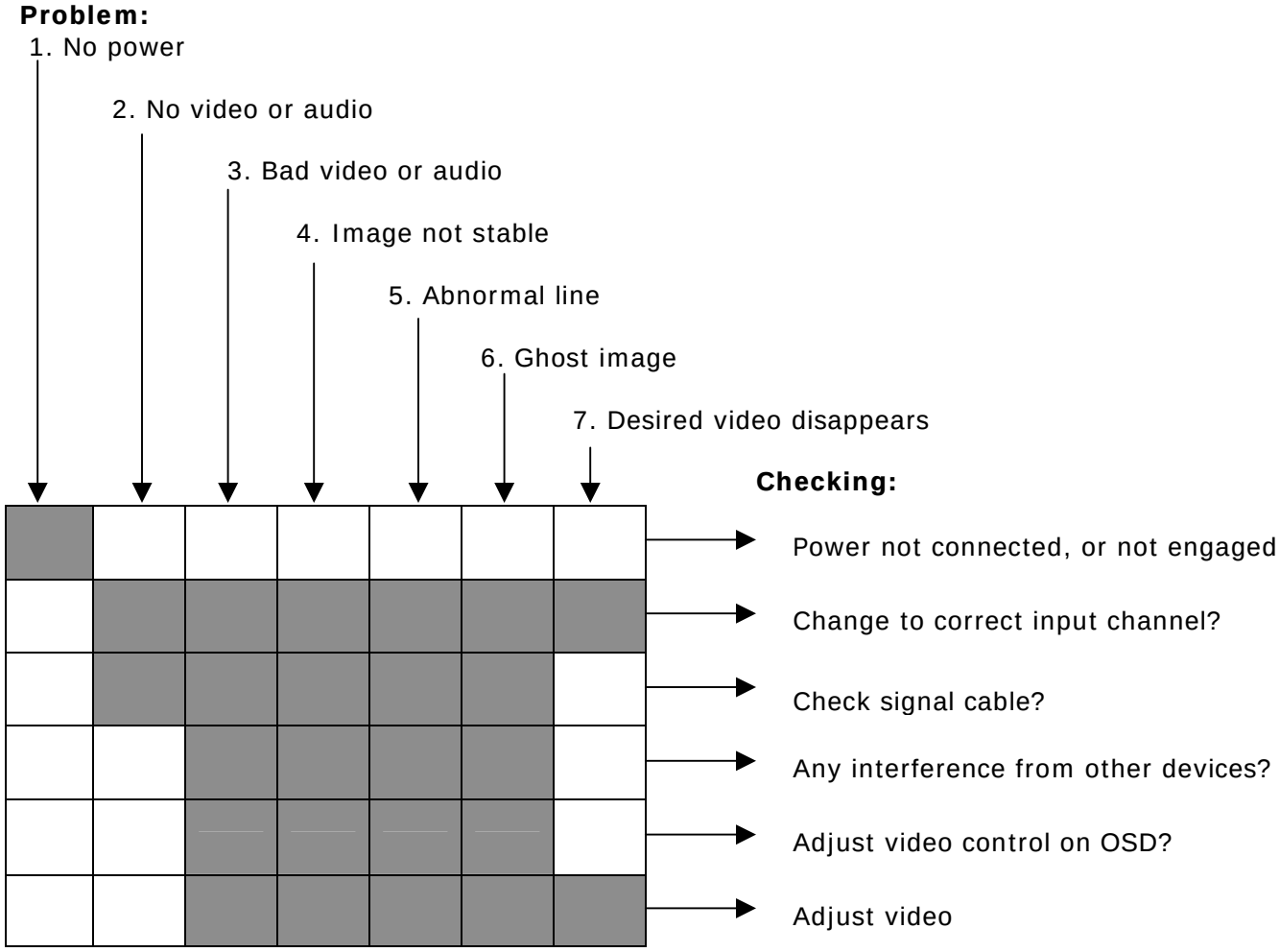
Ambient Operating Temperature	-10° C ~ 50° C (14°F ~ 122°F)
Operating Humidity	20% - 80% RH

Mechanical

Dimensions W x H x D	19.29” x 15.28” x 3.15” (491mm x 388mm x 81mm)
Weight	7 kg (15.43 lbs)
Accessories *Included*	Power supply, power cord, 12VDC / 24VAC adapter Bracket: VESA 100 standard

11. Appendixes

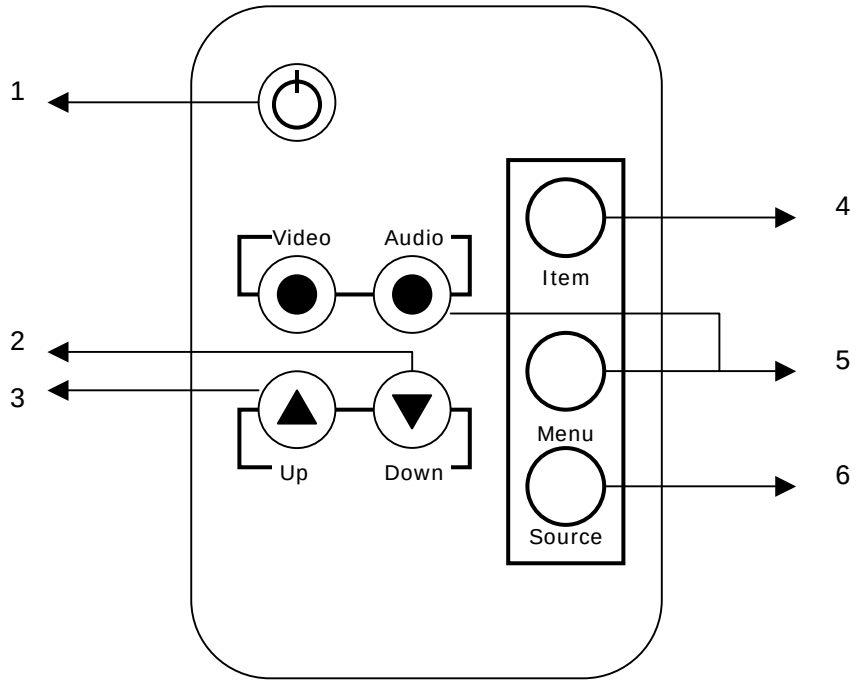
11.1. Troubleshooting



11.2. Package Contents

A. LCD monitor
B. IR remote control
C. Power cord
D. User manual
E. 12V Power Adapter

12. Remote Control



1. **Power**
   Monitor power ON / OFF. At OFF mode, monitor will be on standby status
   LED - Green Light -- Power On
   Red Light -- Standby mode

2. **Adjust** ▼
   Decrease the value on the OSD menu or turn ON / OFF function

3. **Adjust** ▲
   Increase the value on the OSD menu or turn ON / OFF function

4. **Item**
   Choose sub menu from Video
   Press again to enter selected option

5. **Menu**
   NC

6. **Source**
   NC

13.Contact

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Please also visit our WEB-site at:

http://www.videologyinc.com/

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